AMSAT News Service Weekly Bulletins
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AMSAT NEWS SERVICE
ANS-270

ANS is a free, weekly, news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

Please send any amateur satellite news or reports to:
ans-editor@amsat.org

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* 2009 AMSAT Space Symposium and Annual General Meeting October 9-11 *
* Four Points Sheraton Hotel at the Baltimore Washington Airport *
* Details - http://www.amsat.org/amsat-new/symposium/2009/index.php *
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SB SAT @ AMSAT $ANS-270.01
Two Weeks and Counting to 2009 AMSAT-NA Space Symposium

AMSAT News Service Bulletin 270.01
>From AMSAT HQ SILVER SPRING, MD.
September 27, 2009
To All RADIO AMATEURS
BID: $ANS-270.01

Co-Chairs, Frank Bauer, KA3HDO, and Janet Bauer remind you that the 2009 AMSAT Symposium is rapidly approaching! And we hope you can join us, especially given that there are some low-cost airfares out there for those of us in the US.

We have an outstanding venue this year at the Four Points Sheraton at the BWI Airport. Your symposium committee recently did a walk through of this facility. The accommodations and meeting rooms are superb. Frank said, "I do a lot of traveling and I must say that the rooms are absolutely beautiful. You will definitely get a substantial bang for your buck (or Euro, etc.) at this symposium. And planned 40th Anniversary celebratory events will be truly memorable".

+ Free internet in the rooms and in the conference facility
+ Free parking
+ All AMSAT member get free admittance to the 40th Anniversary Party Friday Evening---food, cake, meet 'n greet, eyeball QSOs.
+ Beautiful flat screen televisions in each room
+ Great Banquet Speaker--- Martin Collins, Smithsonian Institution National Air and Space Museum Curator, Space History Museum, "Making

the Space Age, the First 50 years"
+ High-Caliber paper presentations on recent Satellite Developments and satellite operations
+ Poster Session with Satellite, University, and ARISS activities.
+ An AMSAT 40th anniversary retrospective is included
+ IARU Satellite Forum
+ ARISS Operations Team Meeting---ARISS team members and new volunteers are welcome to attend
+ Great prizes from major ham radio manufacturers

Full details are available on-line:
http://www.amsat.org/amsat-new/symposium/2009/index.php
The Symposium Schedule and list of presentations has been posted.

You can now register online for the 2009 AMSAT Space Symposium and Annual Meeting: http://www.amsat-na.com/store2/SymposiumReg2009.php
Online registration will disappear on October 5th so do not wait too long!

Our guest speaker is Dr. Martin Collins from the the Smithsonian Air and Space Museum. He will talk on "Making the Space Age: The First Fifty Years".

Follow the links from the Symposium page to book your room at the hotel. An 800 number is also available. When booking your room let the operator know that you are with the Radio Amateur Satellite Corporation for the special rates. (They don't seem to know about AMSAT.) Please be advised that the cut-off date for the AMSAT block at the Four Points by Sheraton BWI Airport is September 28th. Getting our meeting rooms for free is dependant on the number of room nights we secure. So, PLEASE make your room reservations as soon as possible.

Contact Mark Steiner, K3MS (k3ms@amsat.org) if you are interested in preparing a poster display. Mark needs the following information by Tuesday, Oct. 6 regarding what you will need for your display:

+ Square footage of floor space
+ Number of tables (to be provided by hotel)
+ If a power drop is needed
+ Any other special needs

[ANS thanks Frank Bauer, KA3HDO, and Janet Bauer for the above information]

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SB SAT @ AMSAT $ANS-270.02
ARISSat-1 Structure Drawings Available on AMSAT Web

AMSAT News Service Bulletin 270.02
>From AMSAT HQ SILVER SPRING, MD.
September 27, 2009
To All RADIO AMATEURS
BID: $ANS-270.02

Drawings of the ARISSat-1 structure are available on the AMSAT web site. Bob Davis, KF4KSS and team have done an outstanding job designing this structure around the existing modules for SuitSat-2.

There will be a full scale model of ARISSat-1 at the Symposium as well as working hardware. Bob expects to start cutting metal for the structure next week.

[ANS thanks Gould, WA4SXM for the above information]

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SB SAT @ AMSAT $ANS-270.03
SumbandilaSat Reaches Orbit - Awaiting Commissioning

AMSAT News Service Bulletin 270.03
>From AMSAT HQ SILVER SPRING, MD.
September 27, 2009
To All RADIO AMATEURS
BID: $ANS-270.03

South Africa's SumbandilaSat satellite is now in orbit after a successful liftoff aboard a Soyuz rocket from the Baikonur Cosmodrome in Kazakhstan on September 16. The main payload is a multi-spectral imager, but the satellite also carries an Amateur Radio component consisting of a 2 meter/70 cm FM repeater.

After SumbandilaSat is fully commissioned, the repeater will be activated with an uplink at 145.880 MHz and a downlink at 435.350 MHz; there will also be a voice beacon at 435.300 MHz. The transponder mode will be controlled by a CTCSS tone on the uplink frequency. The CTCSS tone frequencies have yet to be announced.

SumbandilaSat was sponsored by the Department of Science and Technology and was built at SunSpace in cooperation with the Stellenbosch University.

SumbandilaSat has responded by returning its first telemetry. Testing now involves a period of payload qualification to verify operation of each subsystem. This may require 3 months before the satellite continues with the remainder of its mission and opens for general use.

Pieter, ZS1PK/M0PAK provided additional feedback, "Please note that the Amateur payload will probably not be switched on straight after launch. Commissioning is most likely to be performed from Stellenbosch South Africa only. Telemetry will only be heard while in contact with the groundstation and NOT on the amateur frequencies. There are a number of hams involved in the project so rest assured the amateur payload will be supported as soon as practical and safe."

[ANS thanks SA-AMSAT, ARRL, and Pieter ZS1PK/M0PAK for the above information]

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SB SAT @ AMSAT $ANS-270.04
Four New University Cubesats in Orbit and Heard on 70cm

AMSAT News Service Bulletin 270.04
>From AMSAT HQ SILVER SPRING, MD.
September 27, 2009
To All RADIO AMATEURS
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This week India successfully launched seven satellites on its PSLV-C14 misson. The primary payload was OceanSat-2 but also included six other satellites. Four of the satellites are CubeSats in the ISILaunch01, a cluster launch of the following with downlinks in the 70cm amateur radio

band: BEESAT, ITUpSAT1, SwissCube, and UWE-2

NAME	CALL	BEACON	DOWNLINK
BEESAT	DP0BEE	436.000 MHz 0.1W CW	436.000 MHz 0.5W 4800/9600 GMSK
UWE-2			437.385 MHz 0.5W 1200 AFSK 9600 FSK
ITUpSAT1		437.325 MHz 0.1W CW	437.325 MHz 1.0W 19200 GFSK
SwissCube	HB9EG	437.505 MHz 0.1W CW	437.505 MHz 1.0W 1200 FSK

BeeSat is a pico satellite project of the Technical University of Berlin. The main objective of BeeSat is the on orbit verification of newly developed micro reaction wheels for pico satellite applications. Their web page is at: http://www.raumfahrttechnik.tu-berlin.de/menue/forschung/projekte/beesat/v-menue2/news/

The UWE-2 team encourages all radio amateurs to send us the received signals to uwe-2@informatik.uni-wuerzburg.de. Their web page is at: http://www7.informatik.uni-wuerzburg.de/en/research/space_exploration/projekte/cubesat/uwe-2/

ITUpSAT1 is the first student-made satellite of Turkey. Their web page is at: http://usl.itu.edu.tr/

SwissCube is the first satellite entirely built in Switzerland by students from different universities under the supervision of the Space Center EPFL. More than 180 students participated in the adventure from EPFL, from the university of Neuchatel, from the HES-SO (Sion, Yverdon, Fribourg, St-Immer, Le Locle), and from the FHNW (Brugg-Windisch). The main objective is educational and also includes a small telescope which will allow to obtain images of the nightglow, a luminescence phenomena occurring at 100 km of height above the Earth surface. Their web page is at: http://swisscube.epfl.ch/

A replay of the PSLV-C14 launch video can be viewed at:
http://www.youtube.com/watch?v=h69XGgHXMS0&feature=player_embedded#t=16
http://archangelo.net/misc/sat/new/sep09/pslvc14/view.htm

Signal reports have been received from amateur radio operators around the world. Recordings of the beacon signals can be heard at:
http://mstl.atl.calpoly.edu/~bklofas/PSLV/

2-Line Keplerian elements user for the satellites can use the following for a starting point:

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ITUPSAT1
1 35934U 09051D   09266.99498802  .00000364  00000-0  10000-3 0    34
2 35934 098.3432 001.6766 0010433 256.9573 103.1084 14.52588677   111
SWISSCUBE
1 35932U 09051B   09266.92637809  .00000360  00000-0  10000-3 0    33
2 35932 098.3362 001.6263 0006692 285.2589 074.8063 14.52095115    95
BEESAT
1 35933U 09051C   09267.20165191  .00000365  00000-0  10000-3 0    42
2 35933 098.3316 001.8957 0004681 307.1077 052.9887 14.52667744   138
UWE-2
1 35935U 09051E   09267.47761234  .00001929  00000-0  48744-3 0    46
2 35935 098.3417 002.1786 0006949 283.1563 076.8911 14.52112524   176
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[ANS thanks the CubeSat teams for the above information]

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SB SAT @ AMSAT $ANS-270.05
College Night on Satellites Coming October 1-2

AMSAT News Service Bulletin 270.05
>From AMSAT HQ SILVER SPRING, MD.
September 27, 2009
To All RADIO AMATEURS
BID: $ANS-270.05

It's time for another College Satellite night! Expect to hear many Oscar capable NA college club stations on the air Thursday evening Oct. 1st-2nd (NA local times) from 22:00 UTC to 0500 UTC for this special event.

College clubs are getting priority on the QRP AO-51 repeater that night (uplink: 145.880 MHz FM. downlink: 435.150 MHz FM). Please work each college station but afford them the ability to take calls and make as many QSOs as possible.

Club stations will also be on other birds so make as many contacts if you can, on each bird. We have encouraged college stations to QSL all the stations they work during the event as we (either through AMSAT or a college group) are planning on creating an award for working college club stations on satellite.

Make sure to e-mail or call as many hams that you know associated with college ham radio clubs so that they will know about this special event and get on the air - usage and NA-wide involvement is important. While we are focusing on North American activity let me know of interest and participation from other parts of the globe, e-mail Dr. Jay Garlitz, AA4FL off-list at jgarlitz@ufl.edu.

[ANS thanks Gator ARC Faculty Advisor at UF, Dr. Jay Garlitz, AA4FL
 for the above information]

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SB SAT @ AMSAT $ANS-270.06
Satellite Operators Sought for Shortwave Broadcast Interview

AMSAT News Service Bulletin 270.06
>From AMSAT HQ SILVER SPRING, MD.
September 27, 2009
To All RADIO AMATEURS
BID: $ANS-270.06

Ted Randall, host of the shortwave broadcast QSO Radio Show, invites satellite operators who are interested in coming on show and talking about your personal experiences in satellite communication. Ted requests, "I would like someone who can take an entry level approach in that we have a lot of new and young hams listening. If you could have someone join in me in an informal telephone interview please contact me."

The QSO Radio Show is heard on WBCQ 7415 KHz Tuesdays 5-7 PM EDT or 2100-2300 UT; and on WRMI Radio Miami International 9955 KHz Sundays from 1-3 AM EDT or 0500-0700 UTC.

Ted's web page is at: http://www.tedrandall.com and you can e-mail Ted Randall at tedrandall@kaij.us

[ANS thanks Ted Randall for the above information]

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SB SAT @ AMSAT $ANS-270.07
Satellite Shorts From All Over

AMSAT News Service Bulletin 270.07
>From AMSAT HQ SILVER SPRING, MD.
September 27, 2009
To All RADIO AMATEURS
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+ Hams like science. Follow these links for fun and interesting
  scientific articles and videos of space:

  Images from the newly refurbished Hubble Space Telescope:
  http://www.nasa.gov/mission_pages/hubble/multimedia/ero/index.html

  A simulated flyover of Mars using images from the Mars Reconnaissance
  Orbiter and Spirit Rover:

http://www.universetoday.com/2009/09/23/columbia-hills-flyover-2-0-awesome-m
eridiani-panoramas/

  A video discussing a mission to the oceans of Jupiter's moon Europa:

http://www.dailygalaxy.com/my_weblog/2009/09/nasa-worlds-space-powers-target
s-jupiters-europa-.html

  Video of the Shuttle piggyback ride back to Florida:

http://www.universetoday.com/2009/09/21/spectacular-videos-of-shuttle-piggyb
ack-flight/

  Video of NASA Wallops Island launch:
  http://sites.wff.nasa.gov/webcast/

  Watch the ARES-1X rocket built in 6 minutes (time lapse)

http://www.universetoday.com/2009/09/23/build-the-ares-i-x-in-less-than-six-
minutes/

  Cassini views of Saturn, its rings, and moons during equinox:

http://www.nasa.gov/externalflash/cassini_equinox/cassini_equinox_slideshow.
html

+ Congratulations to Omar, XE1AO, for achieving Satellite VUCC
  #182 and to George, WA5KHB, for confirming 225 Grids for his
  VUCC!

+ Henk, PA3GUO has created a video showing the ISS passing over the
  Netherlands along with sounds and decoded signals of the digital
  APRS signals at: http://www.vimeo.com/6657880

+ A helpful page for configuring your TM-D700 rig for operating with
  with spacecraft can be found at: http://www.aj3u.com/tm-d700-tips/

+ Congratulations to Mark, N8MH on his successful AO-51 demonstration
  via the QRP repeater to the JARS club. He worked WA4SCA, KB1RVT,
  KB0RZD, N3TL, AA5UK, KB1PVH, and KD8CAO

+ Remember to tune in on Thursday evenings, October 1, 15, 29 at 8pm
  eastern time will be the sessions of the Hudson Valley Satellite net.
  You can check in via radio if you are in range of the Mt. Beacon ARC
  repeater on 146.970 (PL 100.0) or via echolink on the N2EYH-L node.

+ Jan, PE0SAT has copied FO-29 over Europe. He has posted audio and
  data at:
  Here is a recording of the CW telemetry and the data below.
  http://www.ham.vgnet.nl/downloads/FO-29-CW-19-09-2009_2344CEST.mp3
  http://www.ham.vgnet.nl/images/FO-29-CW-19-09-2009-2355CEST.jpg

+ Listen for Paul, 2E1EUB to be active on the satellites from Scotland
  as 2M1EUB/P starting October 10 for approximately 14 days. Paul will
  try for as many satellites as possible including AO-7.

+ Adrian, AA5UK, will be operating again from Ibiza, Spain (IOTA EU-004,
  Balearic Islands) Grid: JM09tb as: EA6/AA5UK from Oct. 14 - 29th.
  Satellite activity is planned for the FM and SSB satellites. Adrian
  will be posting regular satellite schedules via the AMSAT BB. Sked
  requests are welcome and encouraged; please email him via his email
  address located at QRZ.com. QSL via home call: Direct, bureau, LOTW
  or eQSL.

+ Andrew, VK4TEC operates a satellite status display showing latest
  data received from ISS, PCSAT, AO-51, with manual entries of addi-
  tional satellites. See: http://vk4tec.no-ip.org/sat_status/

+ Congratulations to Astronaut Tracy Caldwell for passing her amateur
  radio license exam. She has been issued the callsign, KF5DBF. Caldwell
  is scheduled to fly with Expedition 23 in April 2010.

[ANS thanks everyone for the above information]

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In addition to regular membership, AMSAT offers membership in the
President's Club. Members of the President's Club, as sustaining donors
to AMSAT Project Funds, will be eligible to receive additional benefits.
Application forms are available from the AMSAT Office. And with that
please be on the look out for plumbers who may have a multi-fauceted
personality.

73,
This week's ANS Editor,
JoAnne Maenpaa, K9JKM
K9JKM at amsat dot org